IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A process for producing a vic-dichloro acid fluoride compound comprising:

fluorinating compound (I) in a liquid phase to form compound (II), and dissociating an ester bond of the compound (II) to form compound (III), or compound (III) and compound (IV);

wherein compounds (I), (II), (III) and (IV) have the following formulas:

$$(R^{H1} - E^{H1} -) CR^{H2} R^{H3} CH_2 - OCOR^{HB}$$
 (I),

$$(CF_2C1CFC1-E^{F1}-)CR^{F2}R^{F3}CF_2-OCOR^{FB}$$
 (II),

wherein,

 R^{HI} is $CX^1X^2CICX^3C1$ - or $CCIX^4$ =CC1-, wherein each of X^1 - X^4 is independently a hydrogen atom or a fluorine atom,

R^{H2} and R^{H3} are each, independently, a hydrogen atom, a fluorine atom, a monovalent saturated hydrocarbon group, a halogeno monovalent saturated hydrocarbon group, a hetero atom-containing monovalent saturated hydrocarbon group or a halogeno (hetero atom-containing monovalent saturated hydrocarbon) group,

E^{H1} is a bivalent connecting group or a single bond,

 E^{F1} is a group corresponding to E^{H1} , and when E^{H1} is a single bond, E^{F1} is a single bond, and when E^{H1} is a bivalent connecting group having one or more hydrogen atoms, E^{F1} is a group corresponding to E^{H1} wherein at least one hydrogen atom is fluorinated, and when E^{H1} is a bivalent connecting group having no hydrogen atom, E^{F1} is the same group as E^{H1} ,

Application No. 10/084,506 Reply to Office Action of March 4, 2004

R^{HB}÷ is a monovalent saturated hydrocarbon group, a halogeno monovalent saturated hydrocarbon group, a hetero atom-containing monovalent saturated hydrocarbon group or a halogeno(hetero atom-containing monovalent saturated hydrocarbon) group,

R^{F2}, R^{F3}, and R^{FB} are as follows:

R^{F2} is a fluorinated R^{H2} group,

R^{F3} is a fluorinated R^{H3} group,

R^{FB} is a fluorinated R^{HB} group,

provided that, when one or more hydrogen atom(s) are present in R^{H2}, R^{H3} or R^{HB}, then R^{F2}, R^{F3} or R^{FB} is a group corresponding to R^{H2}, R^{H3} and R^{HB}, respectively, wherein at least one hydrogen is fluorinated, and

when no hydrogen atom is present in R^{H2}, R^{H3} or R^{HB}, then R^{F2}, R^{F3} or R^{FB} is a group corresponding to R^{H2}, R^{H3} or R^{HB} respectively,

wherein the decomposition of the ester bond of compound (II) is conducted in the absence of solvent.

Claim 2 (Previously Presented): The process according to Claim 1, wherein a molecular weight of the compound (I) ranges from 300 to 1000 and the fluorine content ranges from 30 to 86 mass %.

Claim 3 (Previously Presented): The process of Claim 1, wherein the fluorination reaction is carried out by feeding an excess equivalent amount of fluorine relative to hydrogen atoms in compound (I) into the liquid phase to form compound (II) from the compound (I) in a liquid phase.

Claim 4 (Currently Amended): The process of Claim 1, wherein a C-H bond-containing compound is present in a liquid phase in the reaction system of fluorination in a liquid phase, or the fluorination reaction is carried out under ultra violet radiation of ultra violet ray.

Claim 5 (Currently Amended): The process of Claim 1, wherein compound (I) is produced by reacting compound (A1) with compound (A2),

provided that X is a halogen atom, and R^{H1} , E^{H1} , R^{H2} and R^{H3} have the same meaning as in Claim 1,

wherein (A1) and (A2) have the following formulas:

$$(R^{H1} - E^{H1} -) CR^{H2} R^{H3} CH_2 - OH (A1),$$

 $XCOR^{HB} (A2).$

Claim 6 (Previously Presented): The process of Claim 1, wherein compound (IB), which is compound (I) wherein R^{H1} is CX¹X²C1CX³C1-, is produced by:

reacting compound (B1) with compound (B2) to form the compound (B3), and then reacting the compound (B3) with a chlorinating agent,

wherein X^1 , X^2 , X^3 , E^{H1} , R^{H2} , R^{H3} and R^{HB} have the same meanings as in Claim 1, and wherein (B1), (B2), (B3) and (IB) have the following formulas:

$$(CX^{1}X^{2} = CX^{3} - E^{H1})$$
 $CR^{H2}R^{H3}CH_{2} - OH$ (B1),

 $X^{10}COR^{HB}$ (B2), wherein X^{10} is a halogen atom or a hydroxyl group,

$$(CX^{1}X^{2} = CX^{3} - E^{H1})$$
 $CR^{H2}R^{H3}CH_{2} - OCOR^{HB}$ (B3),

$$(CX^{1} X^{2} C1CX^{3} C1 - E^{H1} -) CR^{H2} R^{H3} CH_{2} - OCOR^{HB} (IB).$$

Claim 7 (Previously Presented): The process of Claim 6, wherein the chlorinating agent is chlorine.

Claim 8 (Previously Presented): The process of Claim 6, wherein compound (IV) and compound (B2) are the same compound.

Claim 9 (Previously Presented): The process of Claim 5, wherein compound (IV) and compound (B2) are the same compound and a part or whole of the resulting compound (IV) is used again for the reaction with compound (A1) or compound (BI).

Claim 10 (Previously Presented): The process of Claim 1, wherein compound (III) and compound (IV) are the same compound.

Claim 11 (Currently Amended): A compound represented by any one of the following formulae:

 $CHC1=CC1O(CH_2)_5OH$,

CH₂=CH(CH₂)₂OCH₂CH₂CH₂OH,

CH₂=CH(CH₂)₂OCOCF₂CFClCF₂Cl,

 $CH_2=CH(CH_2)_2OCH(CH_3)CH_2OCOCF(CF_3)OCF_2CF_2CF_3$,

 $CC1H=CC1O(CH_2)_5OCOCF(CF_3)OCF_2CF_2CF_3$,

CC1F₂CClFO(CF₂)₅OCOCF(CF₃)OCF₂CF₂CF₃,

 $CH_2=CH(CH_2)_2O(CH_2)_3OCOCF(CF_3)OCF_2CF_2CF_3$,

 $CH_2C1CHCl(CH_2)_2O(CH_2)_3OCOCF(CF_3)OCF_2CF_2CF_3$

CF₂ClCFCl(CF₂)₂O(CF₂)₃OCOCF(CF₃)OCF₂CF₂CF₃, or

 $CF_2Cl_1CFCl(CF_2)_2O(CF_2)_2COF.$

Application No. 10/084,506 Reply to Office Action of March 4, 2004

Claim 12 (Previously Presented): The method of Claim 1, wherein $R^{\rm H\,I}$ is $CX^{\rm I}X^{\rm 2}ClCX^{\rm 3}C1$ -.

Claim 13 (Previously Presented): The method of Claim 1, wherein $R^{\rm H1}$ is $CCIX^4$ =CC1-.

Claim 14 (Previously Presented): The method of Claim 1, wherein E^{H1} is a bivalent connecting group.

Claim 15 (Previously Presented): The method of Claim 1, wherein E^{H1} is a single bond.

Claim 16 (Previously Presented): The method of Claim 1, wherein R^{H2} and R^{H3} are halogeno groups containing one or more halogen atoms other than fluorine.

Claim 17 (Previously Presented): The method of Claim 1, wherein R^{H2} and R^{H3} are each, independently, a hydrogen atom, a fluorine atom, a monovalent saturated hydrocarbon group, or a hetero atom-containing monovalent saturated hydrocarbon group.

Claim 18 (Previously Presented): The method of Claim 1, wherein R^{H2} is a monovalent saturated hydrocarbon group, a halogeno monovalent saturated hydrocarbon group, a hetero atom-containing monovalent saturated hydrocarbon group or a halogeno (hetero atom-containing monovalent saturated hydrocarbon) group.

Claim 19 (Previously Presented): The method of Claim 1, wherein R^{H3} is a monovalent saturated hydrocarbon group, a halogeno monovalent saturated hydrocarbon group, a hetero atom-containing monovalent saturated hydrocarbon group or a halogeno (hetero atom-containing monovalent saturated hydrocarbon) group.

Claim 20 (Previously Presented): The method of Claim 1, wherein R^{HB} is a monovalent saturated hydrocarbon group.

Claim 21 (Previously Presented): The method of Claim 1, wherein R^{HB} is a halogeno monovalent saturated hydrocarbon group.

Claim 22 (Previously Presented): The method of Claim 1, wherein R^{HB} is a hetero atom-containing monovalent saturated hydrocarbon group.

Claim 23 (Previously Presented): The method of Claim 1, wherein R^{HB} is a halogeno(hetero atom-containing monovalent saturated hydrocarbon) group.

Claim 24 (Cancelled):

Claim 25 (Previously Presented): The method of Claim 1, wherein the reaction temperature for the fluorination reaction ranges from -50 to $\pm 100^{\circ}$ C.

Claim 26 (Previously Presented): The method of Claim 1, wherein the amount of fluorine gas used for the fluorination ranges from 5 to 30 vol.%.